

AMWG HBC ad hoc group
Comments and Response to comments on Draft Report
May 5, 2003

Comments from ad hoc group members are in regular type, *responses to those comments from other ad hoc members are in italics*, and **responses to comments from Sam / Randy are in CAPS and bold**.

Tom Czapla Comments on latest Draft (April 28, 2003) Report to AMWG

1. Section 2.1. age-4 should be hyphenated. Numbers and dates should be connected with an en-dash.
- DONE
2. Section 2.2. The reference Director's report date should be changed to April 2003.
- DONE
3. Section 2.3. Under GCDAMP, identify what FACA is, I don't think you need the acronym because this is the only time it occurs. Also delete "Grand Canyon Monitoring and Research Center", this was identified earlier and you can get by with just the acronym.
- DONE
4. Section 2.3. Under LCR-MSCP. Identify what NGVD is, again no acronym is needed because it's only used once.
- ACRONYM WAS REMOVED
5. Section 3.0. The listing factors and title should be separated by an m-dash, or at least a couple of spaces.
- AN EM-DASH WAS USED
6. Section 3.0, Listing Factor C, and throughout the rest of the document. Italicize *Lernea*. You may want to search/replace on Lernea, I found 5 occurrences.
- ALL 5 OCCURRENCES CHANGED
7. Section 3.0, Listing Factor C. Number 5. Identify LCR as Little Colorado River (LCR). Then the use of LCR will be justified throughout the rest of the document. I do not think it is confusing with LCR-MSCP, because that acronym stands alone. Note: degree symbol did not come across in each of the bullets.
- TWO ° MARKS INSERTED
8. Section 4.0, second bullet, identify TCD in second sentence.
- DONE
9. Section 5.0, first paragraph, last sentence. Possibly should read "Monitoring must be sufficient ~~to~~ and sensitive enough to detect ..."

- DONE

10. Section 5.0. Numbered management actions all need to be separated by a single line.

- DONE

11. Add the following references:

Douglas, M.E., and P.C. Marsh. 1996. Population estimates/population movements of Gila cypha, an endangered cyprinid fish in the Grand Canyon region of Arizona. Copeia 1996: 15–28.

- DONE

U.S. Department of Interior. 1995. Operation of Glen Canyon Dam: Final environmental impact statement. U.S. Bureau of Reclamation, Salt Lake City, Utah.

- DONE

Just a reminder. The current proposals for reducing or eliminating threats to the humpback chub in Grand Canyon cover the aspects of the recovery goals with two exceptions. The first, which I have brought up several times, is a coordinated effort in developing a broad nonnative fish stocking procedures. As I mentioned in the last conference call, the scope of work proposed for nonnative fish removal in the Little Colorado River (Project #01) had listed two study objectives (#5 and #6) dealing with upstream areas, however, I think a broader geographic scope needs to be considered, potentially including Lake Powell (consider the gizzard shad, although unintentionally stocked, as a recent example). The Upper Basin Recovery Program developed procedures in the mid-90's (U.S. Fish and Wildlife Service 1996), something along these lines is what we were thinking about when we wrote the recovery goals.

The second goal not truly identified in any of the current proposed projects is under Factor D - Adequate regulatory mechanisms: #9. Mechanisms determined for legal protection of adequate habitat in mainstem Colorado River through Grand Canyon and the Little Colorado River. This one may be determined later, and much of it is probably already under Federal lands or could be included in future conservation plans that also need to be developed under Factor D.

U.S. Fish and Wildlife Service. 1996. Procedures for stocking nonnative fish species in the Upper Colorado River Basin. Upper Colorado River Endangered Fish Recovery Program, Denver, Colorado.

- THIS LAST REFERENCE ADDED

Comments by Gary Burton, WAPA, April 28, 2003

Top of Page 3: The Glen Canyon Dam Adaptive Management Program (GCDAMP), last sentence. - This adaptive management program takes findings of the GCMRC as information for dam reoperations and conservation of the endangered fishes.

- DONE

Page 4:

4.0 STRATEGIES FOR IMPROVING CONDITIONS FOR HUMPBAC CHUB

“The fundamental strategy for improving conditions for humpback chub in Grand Canyon must be based on eliminating or minimizing threats to the species. Threats to the species and corresponding recommended management actions are provided in Table 1.”

Comment -> A technicality - we say what the strategy should be based on, but never identify what the strategy is. Another way is to modify the first sentence to read “...Canyon is to eliminate or minimize....” Either way, the strategy should be identified.

- **DONE**

Bottom of Page 7:

5.0 SPECIFIC OPTIONS AND ACTIONS TO ACCOMPLISH STRATEGY

The ~~single~~ most significant management actions for humpback chub in Grand Canyon ~~is~~ reconstruction and operation of a TCD and nonnative control. The TCD will minimize the effect of cold water temperature that continues to inhibit mainstem spawning, survival, and growth of humpback chub. Nonnative control will reduce predation and competition by other fish species.

In general I agree with this statement, but not to the exclusion of nonnative control as an equivalent need. Therefore, my suggested rewrite.

- **DONE, WITH SLIGHT MODIFICATION**

Top of Page 8: “Monitoring must be sufficient to sensitive enough to detect anticipated, as well as unexpected responses.”

- **DONE. CHANGED TO “SUFFICIENT AND SENSITIVE”**

Page 8:

2. Get broodstock humpback chub into captivity to be ready to effectively reproduce fish
 - a. resolve genetics question: are Willow Beach fish suitable and do they represent wild population genetics? (pre-requisite to #2 – 2005)
 - b. evaluate Willow Beach humpback chub genetics (pre-requisite to #2C – 2003)
 - c. start producing humpback chub at Willow Beach for research purposes (2004)

Top of Page 9: Insert below

“9. Implement spill management prevention at Cameron Bridge”

- **DONE**

Other post-TCD, long-term management actions are being developed for inclusion in this management strategy, but do yet require the same urgency as those listed above.

Comments from Bill Davis on April 28th draft report:

* I support Gary's suggested change to include nonnative fish under Section 5.0. This is consistent with Lew Coggins' conclusion last year that this is where our emphasis can be placed right now. There is minimal downside to such actions and we may achieve a significant response.

Response to Bill Davis from Rick Johnson:

There seems to be two possible approaches. One is Rich's identification of the single most important action, which arguable is warming. The other approach is to list all the important actions, and here non-native control would certainly deserve attention along with warming. However, I would argue that flows, sediment augmentation/turbidity management, and parasite control in addition to warming and non-native control would constitute the full suite.

- SENTENCE ADDED TO SECTION 5.0, FIRST PARAGRAPH

* In Table 1, I believe the threats had no priority so numbering them is confusing and unnecessary. I suggest deleting the numbering.

- DONE

* The ad hoc also met April 21 (see 1.1 Background).

- 21 ADDED TO LW DRAFT DOC.

* Proposed editing for section on LCR MSCP, line 8-13. This could read "The LCR-MSCP planning area encompasses Lake Mead to its full pool elevation of 1229 (NGVD). At this elevation, the inflow area is influenced by the reservoir as far upstream as Separation Rapids (RM 239.5), or about 37 river miles upstream of Grand Wash Cliffs (RM 276.5), the western boundary of the AMWG program in Grand Canyon thus creating a geographic overlap between the two programs."

- CHANGE WAS NOT MADE. NEED TO DECIDE WHETHER TO REPLACE TEXT AND ALSO WHETHER TO USE "NGVD" (deleted per a previous comment).

From Dennis Kubly:

Just a precautionary note to ensure that the humpback chub comprehensive plan makes it clear to all readers that the decision on whether to construct and operate a temperature control device will occur only after compliance with all environmental laws is accomplished.

- SECTION 5.0, FIRST PARAGRAPH MODIFIED

From Rick Johnson:

1. In section 2.2, I'm not sure the population estimates for upper basin populations are useful, and may just draw unnecessary discussion. The most recent estimates that I differ from those given. If we are going to provide these estimates, we should provide a citation to the original paper.

Response to Rick Johnson from Rich Valdez:

The purpose for providing numbers of adult humpback chub for upper basin populations was to provide the AMWG with approximate numbers in the five other HBC populations. The population estimates for upper basin populations of HBC are supported by a number of annual reports available from the program office. Some of the most recent reports are available on the Recovery Program web site. I don't think it is necessary to provide all the detail of population estimates in this document, since the purpose of these was to provide AMWG with a gauge of population sizes.

2. In section 5, #2 states "Get broodstock humpback chub into captivity to be ready to effectively reproduce fish." As you all might guess, I'm not in agreement with this statement. I can agree with making it specific to research purposes, but I'm not in agreement that we're ready to produce fish to release into the river. I could also agree with language such as: "Assess need for broodstock development for research, refugia, and supplementation."

- DONE, SENTENCE ADDED.

3. In section 5, #3 states "Expand range of existing humpback chub population to other Grand Canyon tributaries." I can agree with statement if it means expanding the range using changes in temperature, flows and non-native control, but I'm not in agreement with the blanket statement. I could also agree with language such as: "Develop and implement strategy for creation of refugia as a short-term safeguard until the range of humpback is expanded into the mainstem through temperature, flows and non-native control."

- DONE.

4. In Table 1, it doesn't look like the management actions are comprehensive. I noticed that turbidity management is not listed as a strategy for non-native predation. Perhaps there are other actions that are not included. I'm sorry that I don't have time to fully review.

- THE AD HOC GROUP NEEDS TO ADDRESS HOW THE CROSSWALK TABLE DEVELOPED AT THE APRIL 22, 2003 MEETING WILL BE USED, PERHAPS IN ADDITION TO OR IN LIEU OF TABLE 1 OF THE DRAFT REPORT. THE AD HOC TABLE LINKS MANAGEMENT ACTIONS WITH THREATS.

Comments from Don Metz:

Shouldn't " examine the feasibility of establishing a supplemental stocking program for humpback chub in Grand Canyon using wild caught young of the year humpback chub removed from the LCR and grown to a large size in captivity " be included as a specific option and potential management action?

- ADDED AS BULLET "d." TO SECTION 5.0, #2